

16. ANACORTES–SAN JUAN ISLANDS

The Anacortes – San Juan Islands route connects the mainland with Lopez, Shaw, Orcas, and San Juan Islands. Daily ridership on this route averages 2,645 passengers plus 2,275 vehicles and drivers for a total average daily ridership of 4,920. For the month of May 1999, average daily ridership was 5,010.

Survey responses for this route were grouped and tabulated for all domestic ferry travel between any combination of the five terminals. Given the combinations of travel possible, the greater travel times and distances required, and the frequency of service, it was not possible to confine the survey timeframe to the PM peak period for this route. Instead, several of the daily vessel sailings for each pair of terminals were surveyed and the survey data were expanded to the daily level. This reflects the fact that, by and large, peak travel periods are essentially determined by when service is available. While the 1993 survey results were reported as PM peak, they too included sailings outside of the 3-7 PM peak window, including the domestic portion of the 8:00 AM international sailing to Sidney, B.C. Therefore, comparisons between the 1993 “PM peak” results and 1999 “daily” results can be made on a general basis.

“...The survey data were expanded to the daily level. This reflects the fact that, by and large, peak travel periods are essentially determined by when service is available.”

Key trip making information and geographic travel patterns for patrons of this route are presented herein. Additional route-specific survey tabulations and results for the weekday and the Sunday survey periods, including ferry user demographic information, can be found in Appendix B.

16.1 TRIP MAKING INFORMATION

16.1.1 Weekday Trip Statistics

Weekday trip statistics presented here are grouped into three topics:

- Trip purpose and usage frequency;
- Travel modes and round-trip patterns; and
- Desired transit improvements.

As noted above, the following results generally apply to daily travel patterns rather than distinguishing PM peak and PM non-peak periods.

Trip Purpose

Trip purpose and ridership frequency information for the domestic Anacortes – San Juans route is presented in Table 16-1. Weekday riders are fairly evenly split between the three trip purpose categories. Recreational travel was reported the most frequently at 37% of

daily ridership, followed by commuter oriented travel at 33%, and personal travel at about 30%. In general these results are similar to findings in the 1993 survey, with approximately 32% work/school or business related travel and approximately 68% of PM peak period travel being either recreational or personal.

The most commonly reported ridership frequency, at 50%, was two to five one-way trips in the past week, while 22% reported that this was their first trip in the past week. With approximately 75% of daily riders reporting infrequent or moderate usage, not only is the self-contained nature of the San Juan community highlighted, but the tourism orientation of the route is clear as well.

Table 16-1
Trip Purpose and Frequency of Use Distribution
Anacortes-San Juan Islands – Weekday Service Period

<i>Frequency of Use / Trip Purpose</i>	<i>Work/School/ Business Related</i>	<i>Medical Appt./ Personal Business/ Other</i>	<i>Social/ Recreational/ Shopping/ Sight-seeing</i>	<i>All Trip Purposes</i>	<i>Expanded Ridership Total</i>
1st Ride in Past 7 Days*	11.7%	15.0%	36.9%	22.1%	887
2 to 5 Rides in Past 7 Days	47.9%	56.9%	47.1%	50.2%	2,015
6 to 9 Rides in Past 7 Days	14.8%	9.2%	3.2%	8.8%	353
10 or More Rides in Past 7 Days	17.0%	2.7%	2.8%	7.4%	298
No Answer	8.6%	16.2%	10.0%	11.4%	456
Totals	100.0%	100.0%	100.0%	100.0%	4,010
Overall Trip Purpose Distribution	32.9%	29.6%	37.5%	100.0%	
Expanded Ridership	1,321	1,186	1,504	4,010	

* 1st Ride in Past 7 Days includes passengers who answered: 1st ride in past year and 1st ride ever.

Origin and destination types by direction for daily domestic travel are shown in Table 16-2. The directional split is quite balanced, with slightly more riders in the westbound direction. The most prominent origin and destination type pair is other-to-home at approximately 34% of the total for both directions. Interestingly, a large percentage of all riders indicated “other” for either their origin or destination. Home-to-other represents approximately 21% of all trips and trips with origin-destination pair type of other-to-other represent approximately 18% of total trips in both directions. Clearly, this route, with its circular pattern and interdependent island communities, is unlike any other within the WSF system.

Table 16-2
Trip Origin and Destination Types by Direction
Anacortes-San Juan Islands – Weekday Service Period

<i>Origin & Destination Types</i>		<i>Destination Shares Across All Origins:</i>			<i>Expanded Ridership Total</i>
<i>Origin Place</i>	<i>Destination Place</i>	<i>Eastbound Trips</i>	<i>Westbound Trips</i>	<i>Both Directions</i>	
Home	Home	6.8%	3.4%	5.0%	202
	Work/School	1.9%	8.4%	5.2%	210
	Other	21.2%	21.1%	21.1%	848
Work/School	Home	16.1%	7.9%	11.9%	476
	Work/School	0.9%	1.5%	1.2%	50
	Other	1.7%	2.1%	1.9%	77
Other	Home	28.0%	38.8%	33.5%	1,345
	Work/School	1.4%	1.9%	1.6%	66
	Other	21.9%	15.0%	18.3%	735
Totals		100.0%	100.0%	100.0%	4,010
Travel Direction Distribution		48.5%	51.5%	100.0%	
Expanded Ridership		1,946	2,065	4,010	

Travel Modes and Round-Trip Patterns

Table 16-3 presents round-trip patterns and methods for domestic daily ridership on the Anacortes – San Juan ferry route. Round-trip patterns for the domestic island routes, like trip-purpose and origin-destination results, also reveal different travel patterns than found for other WSF routes. A higher percentage of respondents (34%) indicated they were on the first-half of a round-trip than respondents on other routes (generally less than 25%); however, this may be attributable to the broader time window in which the survey was conducted in addition to differences in travel patterns. The percentage of riders making a round-trip within one day, at less than 45%, is considerably lower than on other WSF routes, in which three-quarters of weekday PM peak and non-peak riders typically make a round-trip within the same day. These results again reveal the removed location, the self-contained nature of the islands, and the tourist-related travel on this route.

Table 16-3
Round-Trip Patterns and Methods
Anacortes-San Juan Islands – Weekday Service Period

<i>Round-Trip Segment & Method / Time</i>	<i>Today</i>	<i>Some Other Day</i>	<i>No Answer</i>	<i>Expanded Ridership</i>
Declared Initial Trip (Reported on 2nd Half of Round-Trip)				62.7%
Same Ferry Route	47.5%	25.1%	13.0%	2151
Not Using Ferry System	0.0%	0.1%	0.0%	4
Different Ferry Route	2.8%	2.1%	1.4%	158
No Answer	2.9%	2.8%	2.3%	202
<i>Total Declared Initial Trip</i>	<i>53.2%</i>	<i>30.1%</i>	<i>16.6%</i>	<i>2514</i>
Expected Return Trip (Reported on 1st Half of Round-Trip)				34.2%
Same Ferry Route	24.9%	51.2%	12.9%	1221
Not Using Ferry System	0.3%	0.0%	0.3%	8
Different Ferry Route	0.6%	0.9%	0.0%	21
No Answer	1.1%	5.9%	1.9%	122
<i>Total Expected Return Trip</i>	<i>26.9%</i>	<i>58.1%</i>	<i>15.1%</i>	<i>1372</i>
No Answer (Did Not Report Round-Trip Status)				3.1%
<i>No Answer</i>			<i>100.0%</i>	<i>124</i>
Expanded Ridership Total	1,707	1,554	749	4,010

Access and egress mode shares and boarding mode distributions from the 1993 survey were modified to approximate 1999 Travel Survey methods and data collection procedures for comparison purposes. However, the 1993 results are not directly comparable to the expanded survey results based upon the data collected in 1999. Please see Section 3.5.2 in Chapter 3 for a detailed explanation of how the boarding mode numbers differ. These modified percentages can nonetheless be used for generalized comparisons, as presented in the following discussion.

Boarding method, access mode and egress mode information is shown in Table 16-4. Relatively few riders on the domestic Anacortes – San Juans route during the weekday service period indicated that they boarded as pedestrians. The percentage of walk-on boardings appears to have decreased slightly from 17% of riders in 1993 to 12% for the 1999 survey. Interestingly, the percentage of walk-on passengers boarding with a bicycle has dropped considerably, from about 14% in 1993 to 3% in 1999, a result which has not been found on any other route. At this time, it is unclear why the percentage of walk-on passengers boarding with a bicycle have dropped; it may be simply the result of daily variation. The 1993 survey day could have encompassed an unusually large group of bicyclists, creating an over-representation of cyclists on the San Juan route in the 1993 survey results.

It also appears that the percentage of in-vehicle passengers boarding as a passenger in a vehicle has decreased dramatically as a proportion of total in-vehicle boardings. The percentage of ferry riders boarding as a passenger in a vehicle has decreased from 69% in

1993 to 38% in 1999. This represents a drop in average vehicle occupancy from 3.2 persons to 1.6. Again, this may be daily variation, attributable to a couple of vans or buses full of people in 1993, which could have skewed the earlier survey's results.

A vehicle remains the most common access and egress mode for walk-on passengers; in fact, the share of walk-on riders accessing and egressing the ferry terminal by vehicle increased by more than 15 percentage points between 1993 and 1999. Specifically, walk-on riders accessing the terminal by vehicle increased from 60% in 1993 to 78% in 1999, and egress shares increased from 58% in 1993 to 73% in 1999. The percentage of walk-on riders accessing the terminal by walking, biking, and bus or shuttle all decreased between 1993 and 1999. Some of access/egress mode shift trend may be attributable to the aforementioned differences in the collection of mode data between the two surveys.

“The share of walk-on riders accessing and egressing the ferry terminal by vehicle increased between 1993 and 1999”

Table 16-4
Access Mode to Ferry – Boarding Method – Egress Mode from Ferry
Anacortes–San Juan Islands – Weekday Service Period

<i>Access Mode to Ferry Terminal</i>	<i>Percent Distrib.</i>	<i>Boarding Method</i>	<i>Percent Distrib.</i>	<i>Mode Shares</i>	<i>Egress Mode from Ferry Terminal</i>	<i>Percent Distrib.</i>
Pedestrian/Bicycle	18.5%	Walked-On		11.7%	Pedestrian/Bicycle	26.7%
By Vehicle*	78.1%	Pedestrian	96.7%		By Vehicle*	72.5%
By Bus or Shuttle	<u>3.4%</u>	Pedestrian w/ Bicycle	<u>3.3%</u>		By Bus or Shuttle	<u>0.9%</u>
Total	100.0%	Total	100.0%		Total	100.0%
In-Vehicle	100.0%	In-Vehicle		88.3%	In-Vehicle	100.0%
		Vehicle Drivers*	62.1%			
		Vehicle Passengers	<u>37.9%</u>			
		Total	100.0%			
Total				100.0%		
Expanded Ridership Total				4,010		
* includes motorcycles						

Table 16-5 displays wait-time information by boarding method for riders on the domestic Anacortes – San Juan Islands ferry route. Due to the longer headways associated with this route, and thus higher time costs for missing a sailing due to late arrival or long vehicle queues, wait-times for this route are correspondingly longer than for other routes in the WSF system. This is particularly true for ferry passengers boarding in a vehicle. While 71% of walk-on passengers waited 30 minutes or less, only 40% of those boarding in a vehicle waited less than 30 minutes and the majority waited 31 to 60 minutes to board.

Table 16-5
Wait Time Distribution by Boarding Method
Anacortes-San Juan Islands – Weekday Service Period

<i>Wait Time Category / Boarding Method</i>	<i>Walk Board (Pedestrian & Bicycle)</i>	<i>Vehicle Board (Driver & Passenger)</i>	<i>Expanded Ridership Total</i>
Zero to 10 Minutes	42.1%	7.9%	478
11 to 30 Minutes	29.1%	32.8%	1,299
31 to 60 Minutes	13.1%	34.8%	1,295
61 to 90 Minutes	4.0%	13.2%	486
More Than 90 Minutes	1.7%	7.5%	274
No Answer	10.0%	3.7%	178
Totals	100.0%	100.0%	
Expanded Ridership	471	3,539	4,010

Table 16-6 provides parking statistics for those passengers who walked-on the Anacortes – San Juan ferry. About 24% of walk-ons paid to park a vehicle at one end of the ferry route and another 2% paid to park a vehicle at both ends. Overall, more than one in three walk-ons who accessed and/or egressed the terminals by vehicle used some form of paid parking. Conversely, about 21% of walk-on riders parked for free at both ends of the route, and another 35% obtained free parking at one end.

Table 16-6
Walk-Board Passenger Parking Statistics
Anacortes-San Juan Islands – Weekday Service Period

<i>Reported Parking Characteristics</i>	<i>Expanded Ridership</i>	<i>Percent of Total</i>	<i>Average Total Parking Paid*</i>
Used Paid Parking on Both Sides	11	2.3%	\$4.29
Used Paid Parking One Side & Free Parking Other Side	49	10.4%	\$2.38
Used Free Parking on Both Sides	98	20.8%	\$0.00
Paid Parking One Side & Did Not Park Other Side or Insufficient Information	63	13.5%	\$5.00
Free Parking One Side & Did Not Park Other Side or Insufficient Information	118	25.1%	\$0.00
Did Not Park on Either Side or Insufficient Parking Information	132	28.0%	NA
Totals	471	100.0%	

*Only surveys with a reported dollar amount paid for parking were included in the average cost calculation (those with free parking were excluded).

Desired Transit Improvements

Domestic Anacortes – San Juan ferry riders requested “service at both ends of the ferry route” most frequently, as shown in Table 16-7, which accounts for 20% of daily riders, and represents another departure from results found for other routes. Simply put, most other routes in the WSF system already have some level of service at both terminal ends, so a majority of riders on other routes requested service within 2 blocks of their destination. These results are likely a result of the removed location of this route and the rural nature of Skagit and San Juan Counties. Riders on this route also returned the highest percentage of “None of the Above” or “No Answer” responses, which likely reflects recreational travel.

Table 16-7
Transit Improvements Desired
Anacortes–San Juan Islands – Weekday Service Period

<i>Transit Improvement</i>	<i>Distribution</i>	<i>Expanded Ridership</i>
Service within 2 Blocks of Origin or Destination	8.5%	339
Service at Both Ends of Ferry Route	20.4%	820
Seamless Connection between Ferry & Bus	4.6%	184
Employer Paid or Subsidized Bus Pass	2.4%	97
More Park & Ride Lots/Spaces Available	12.2%	490
None of the Above/No Answer	43.7%	1,754
<i>Frequent Write-In Comments</i>		
More Passenger Only Service	2.0%	81
Lower Park & Ride Parking Fees/Free	1.5%	62
More Park & Ride Information	4.5%	180
"Other" Comments	0.1%	5
Totals	100.0%	4,010

16.1.2 Sunday Trip Statistics

Sunday trip statistics presented here are grouped into two categories:

- Trip purpose and usage frequency; and
- Travel modes and round-trip patterns.

Trip Purpose

Table 16-8 presents trip purpose and frequency of use information for domestic Anacortes – San Juan Sunday survey period respondents. Nearly three quarters of all Sunday respondents reported traveling for social/recreational/shopping or sightseeing purposes

and an additional 20% reported personal travel, accounting for 92% of all Sunday survey period respondents. Compared to results of the 1993 survey, the percentage of recreational travel appears to have increased slightly, from about 85% percent recreational or personal travel in 1993. Approximately 83% of Sunday respondents reported five or fewer rides in the past week, this relatively infrequent ridership highlights the recreational nature of Sunday trips.

Table 16-8
Trip Purpose and Frequency of Use Distribution
Anacortes-San Juan Islands – Sunday Survey Period

<i>Frequency of Use / Trip Purpose</i>	<i>Work/School/ Business Related</i>	<i>Medical Appt./ Personal Business/ Other</i>	<i>Social/ Recreational/ Shopping/ Sight-seeing</i>	<i>All Trip Purposes</i>	<i>Usable Responses</i>
1st Ride in Past 7 Days*	11.6%	15.8%	25.7%	22.7%	128
2 to 5 Rides in Past 7 Days	72.1%	63.2%	57.8%	60.0%	339
6 to 9 Rides in Past 7 Days	2.3%	6.1%	2.7%	3.4%	19
10 or More Rides in Past 7 Days	0.0%	0.9%	1.0%	0.9%	5
No Answer	14.0%	14.0%	12.7%	13.1%	74
Totals	100.0%	100.0%	100.0%	100.0%	565
Overall Trip Purpose Distribution	7.6%	20.2%	72.2%	100.0%	
Usable Responses	43	114	408	565	

* 1st Ride in Past 7 Days includes passengers who answered: 1st ride in past year and 1st ride ever.

Travel Modes and Round-Trip Patterns

Round-trip patterns and methods as reported by Sunday survey period respondents are shown in Table 16-9. About 70% of Sunday survey respondents reported they were completing the second half of a round-trip, which is one of the highest percentages reported of the WSF routes. However, most second half respondents also reported that they had made the first half on some other day, which is not unexpected for the large percentage of recreational travel on Sundays and the relatively long travel times which discourage daily travel beyond sightseeing on the vessel. About half of Sunday respondents making the first half of a round-trip also reported they would complete their round-trip on some other day, rather than on the same day. These findings are quite different than other routes, except for the Port Townsend – Keystone route, which is also influenced by recreational travel.

Sunday survey respondents also reported considerably longer wait-times than did weekday riders, as shown in Table 16-10. This reflects the weekend peak in recreational travel as well as less frequent service on this route, and similar to other routes, longer wait times generally apply to ferry patrons boarding in a vehicle, rather than walk-on passengers. Two thirds of walk-on passengers reported boarding a ferry in 30 minutes or less, compared to less than 20% of in-vehicle passengers. The majority of in-vehicle passengers (40%) waited over 90 minutes to board a ferry.

Table 16-9
Round-Trip Patterns and Methods
Anacortes-San Juan Islands – Sunday Survey Period

<i>Round-Trip Segment & Method / Time</i>	<i>Today</i>	<i>Some Other Day</i>	<i>No Answer</i>	<i>Usable Responses</i>
Declared Initial Trip (Reported on 2nd Half of Round-Trip)				70.3%
Same Ferry Route	16.6%	63.7%	10.1%	359
Not Using Ferry System	25.2%	151.1%	0.0%	7
Different Ferry Route	0.0%	302.2%	25.2%	13
No Answer	50.4%	327.5%	75.6%	18
<i>Total Declared Initial Trip</i>	<i>17.4%</i>	<i>71.5%</i>	<i>11.1%</i>	<i>397</i>
Expected Return Trip (Reported on 1st Half of Round-Trip)				27.6%
Same Ferry Route	22.4%	51.9%	11.5%	134
Not Using Ferry System	0.0%	0.6%	0.0%	1
Different Ferry Route	0.6%	4.5%	0.0%	8
No Answer	4.5%	2.6%	1.3%	13
<i>Total Expected Return Trip</i>	<i>27.6%</i>	<i>59.6%</i>	<i>12.8%</i>	<i>156</i>
No Answer (Did Not Report Round-Trip Status)				2.1%
<i>No Answer</i>			<i>100.0%</i>	<i>12</i>
Usable Responses	112	377	76	565

Table 16-10
Wait Time Distribution by Boarding Method
Anacortes-San Juan Islands – Sunday Survey Period

<i>Wait Time Distribution / Boarding Method</i>	<i>Walk Board (Pedestrian & Bicycle)</i>	<i>Vehicle Board (Driver & Passenger)</i>	<i>Usable Responses</i>
Zero to 10 Minutes	28.8%	4.3%	53
11 to 30 Minutes	38.1%	15.4%	114
31 to 60 Minutes	11.0%	25.3%	126
61 to 90 Minutes	6.8%	10.5%	55
More Than 90 Minutes	6.8%	40.0%	187
No Answer	8.5%	4.5%	30
Totals	100.0%	100.0%	
Usable Responses	118	447	565

16.2 GEOGRAPHIC TRAVEL PATTERNS

This section provides tables and map figures which present the locations for ferry user trip origins and destinations. Of key interest for updating the WSF travel demand forecasting model are the weekday origin-destination (O-D) trip tables by travel direction, presented as expanded daily service period ridership volumes and distributions for all modes, as well as for walk-on and in-vehicle boardings. Similar O-D trip tables presenting unexpanded Sunday survey period distributions are also provided. Complementing the weekday and Sunday trip tables are two sets of map figures. The first set shows the geographic flows of origins and destinations, including route district percentage distributions, for all trips by direction. The second set of maps illustrates the directional densities of trip origins and destinations, using different pinpoint symbols to delineate walk-on and in-vehicle boarding methods.

16.2.1 Weekday Service Period Trip Patterns

Table 16-11 summarizes westbound weekday service period origin and destination locations and Figure 16-1 illustrates origin and destination information for all boarding modes. Orcas Island and San Juan Island are the two most commonly reported destination locations for weekday service period respondents, at 42% and 46%, respectively. Compared to the 1993 results, the percentage of riders traveling to Orcas Island has dropped slightly, while the percentage of riders with Friday Harbor and other San Juan Island destinations has increased from 38% in 1993 to 46% in 1999. A smaller percentage of weekday riders reported destinations on Lopez Island, 10% in 1999 compared to 16% in 1993. Rider origin locations vary widely, as found in the 1993 survey, and are typically similar.

Weekday service period origin and destination locations for eastbound travelers are summarized in Table 16-12 and graphically displayed in Figure 16-2. Among origin locations, Orcas Island accounted for about half of all rider origins, with San Juan Island comprising another 42%. The Anacortes/Fidalgo Island area accounts for approximately 13% of weekday service period riders' destination locations, with Lopez Island accounting for about 12%. Interestingly, the share of riders traveling to Lopez and Orcas Islands in the eastbound direction appears to have decreased since the 1993 survey. Destination locations in west Whatcom County and greater north Seattle have increased since the 1993 survey, up from 1% to 10% in 1999 and up from 4% to 11% in 1999, respectively.

As found on other routes, walk-on passenger origins and destinations tend to be more concentrated near the terminals, whereas passengers boarding in a vehicle have much more dispersed origin and destination locations. Origin and destination locations for westbound walk-on passengers are summarized in Table 16-13 and locations for westbound in-vehicle passengers are shown in Table 16-14, with both are geographically illustrated in Figure 16-3. By far the largest percentage of walk-on passengers are going to San Juan Island, accounting for over 50% of westbound walk-on destinations. Orcas Island accounts for approximately 32% of walk-on passenger destinations. Typically, walk-on passengers are coming from the Anacortes area, which accounts for 26% of walk-on passenger origin locations, with inter-island travel from Orcas to San Juan Island accounts for about 15%. About 45% of all passengers boarding in a vehicle are going to either San Juan or Orcas Island. In general, in-

vehicle ferry passengers are coming from west Skagit County, the greater Seattle area, or are from “all other places,” which could include outlying destinations in the 12 county area as well as locations outside of the 12 county area. Inter-island trips account for about 16% of all westbound in-vehicle trips.

Table 16-15 summarizes origin and destination locations for weekday eastbound walk-on passengers, Table 16-16 provides the same information for passengers boarding in a vehicle, and Figure 16-4 illustrates this information for both boarding modes. Eastbound walk-on passengers also display concentrated origin and destination locations. Nearly 90% are originating from San Juan Island. Lopez Island accounts for 34% of eastbound walk-on destination locations, followed by the Anacortes/Fidalgo Island district at 21%, with greater south and downtown Seattle destinations accounting for 11%.

Interestingly, over 50% of vehicle board passengers are coming from Orcas Island and nearly 37% are originating in San Juan Island. There are four main destinations reported by passengers boarding the ferry in a vehicle; Anacortes/Fidalgo Island, greater north Seattle, greater south and downtown Seattle, and west Watcom County, all accounting for 10 to 12% of daily destination locations.

Table 16-11
Anacortes-San Juan Islands O-D Trip Table
Weekday Service Period – Westbound – All Boarding Modes

ORIGIN	DESTINATION	Orcas Island	San Juan Island	Lopez Island	Shaw Island	Origin Totals	Origin Shares
		1901	1902	1903	1904		
Orcas Island	1901		170			170	8.5%
Lopez Island	1903	27	138		8	172	8.6%
Shaw Island	1904	16				16	0.8%
Anacortes/Fidalgo Island	1905	102	70	31	3	206	10.2%
Mount Vernon/Burlington	1906		9	6		15	0.7%
Other West Skagit County	1907	140	127	18	8	293	14.6%
West Whatcom County	1908	59	77	25	7	168	8.4%
Other BC/Canada	1911	4	10		3	16	0.8%
Island County	1912	47	9			55	2.8%
Greater Everett	1913	17	9	9		35	1.7%
Lynnwood/Edmonds/Mountlake Terrace	1914	27	28	19	10	84	4.2%
Other West Snohomish County/Camano Island	1915	16		8		24	1.2%
Greater South Seattle/CBD	1916	154	57	17	3	230	11.4%
Greater North Seattle	1917	37	38	11		86	4.3%
Bothell-Kirkland/Redmond	1918	20	13			33	1.6%
Greater Bellevue/Mercer Island	1919	9	13	16		37	1.9%
Southwest King County	1920	44	29			73	3.6%
Other West King County	1921	16	9	5		30	1.5%
West Pierce/Thurston Counties	1922	4	4	8	10	26	1.3%
Clallam/Jefferson/Kitsap Counties	1923	19	14			33	1.6%
All Other Places	1924	87	101	20		208	10.4%
Destination Totals		844	923	193	50	2,010	100.0%
Destination Shares		42.0%	45.9%	9.6%	2.5%	100.0%	

Figure 16-1
Anacortes - San Juan Islands Westbound Weekday Service Period Trips
All Boarding Modes

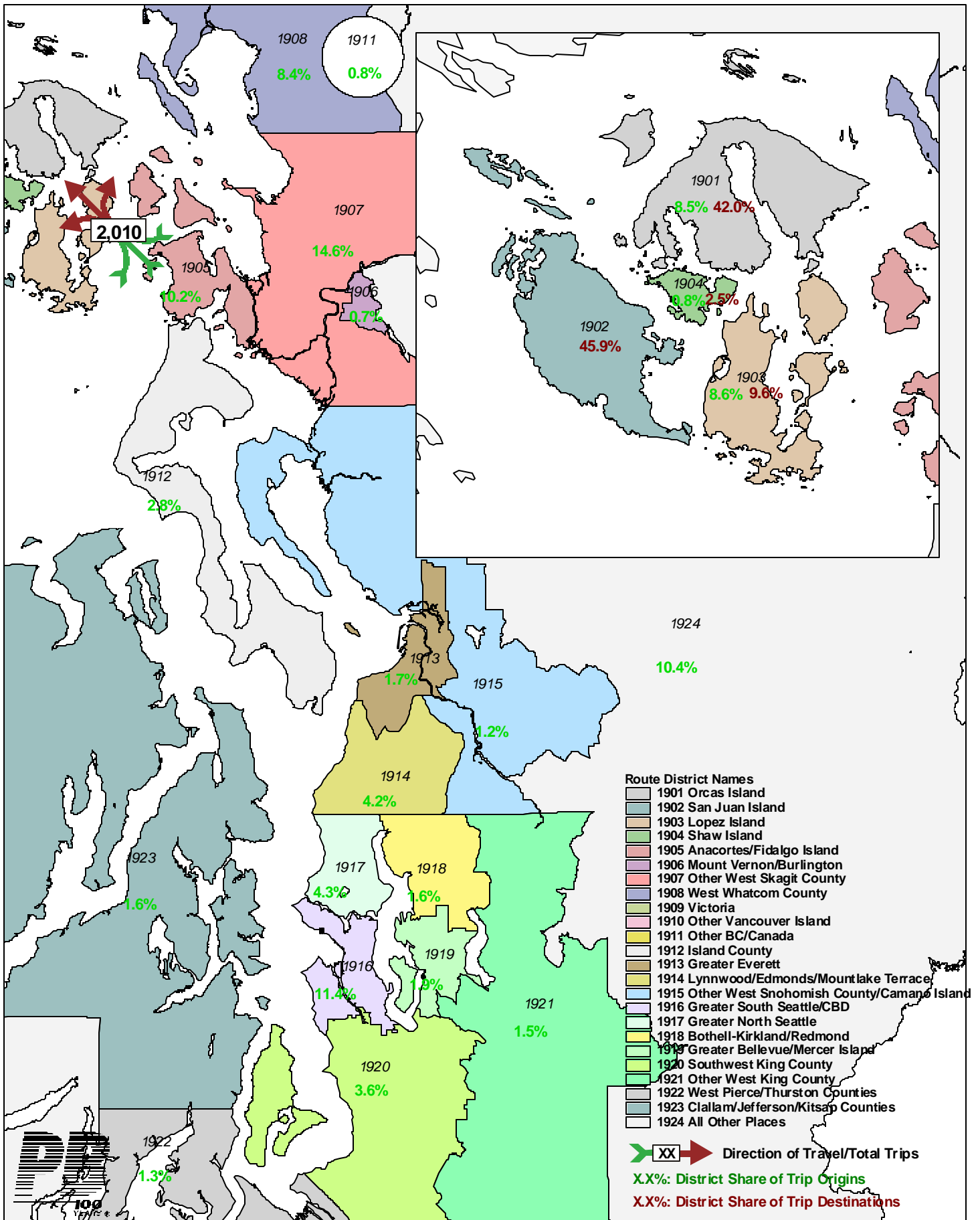


Table 16-12
Anacortes–San Juan Islands O-D Trip Table
Weekday Service Period – Eastbound – All Boarding Modes

ORIGIN	DESTINATION																								Origin Totals
		Orcas Island 1901	Lopez Island 1903	Shaw Island 1904	Anacortes/Fidalgo Island 1905	Mount Vernon/Burlington 1906	Other West Skagit County 1907	West Whatcom County 1908	Other BC/Canada 1911	Island County 1912	Greater Everett 1913	Lynnwood/Edmonds/Mountlake Terrace 1914	Other West Snohomish County/Camano Island 1915	Greater South Seattle/CBD 1916	Greater North Seattle 1917	Bothell/Kirkland/Redmond 1918	Greater Bellevue/Mercer Island 1919	Southwest King County 1920	Other West King County 1921	West Pierce/Thurston Counties 1922	Collum/Jefferson/Kitsap Counties 1923	All Other Places 1924			
Orcas Island 1901			50		135	34		89	11		11			156	146		34	44	34		34	101		891	
San Juan Island 1902		28	167	19	99	39	95	67		17	6	22	22	34	39	17	6	28	11	5	6	45		769	
Lopez Island 1903								17		26			48	17	9	9		9			17			153	
Shaw Island 1904																2					2			5	
Destination Totals		28	216	19	234	73	95	174	11	43	17	34	70	208	193	28	39	81	45	5	59	145		1,817	
Destination Shares		1.5%	11.9%	1.1%	12.9%	4.0%	5.2%	9.6%	0.6%	2.3%	0.9%	1.8%	3.9%	11.4%	10.6%	1.5%	2.2%	4.5%	2.5%	0.3%	3.3%	8.0%		100.0%	

Figure 16-2
Anacortes - San Juan Islands Eastbound Weekday Service Period Trips
All Boarding Modes

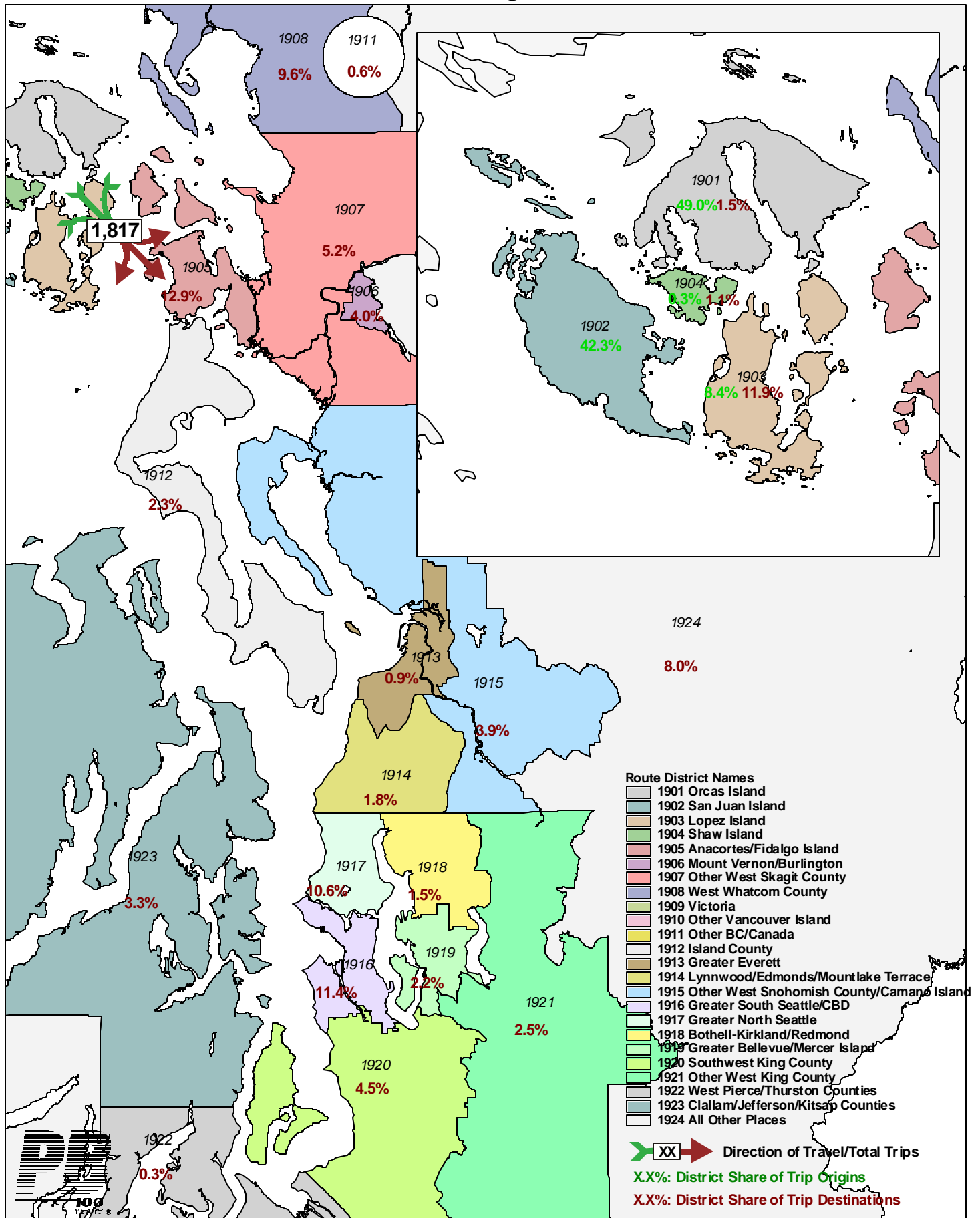


Table 16-13
Anacortes-San Juan Islands O-D Trip Table
Weekday Service Period – Westbound – Walk-On Boardings

ORIGIN	DESTINATION	Orcas Island	San Juan Island	Lopez Island	Shaw Island	Origin Totals	Origin Shares
		1901	1902	1903	1904		
Orcas Island	1901		31			31	15.8%
Lopez Island	1903		8		8	16	7.9%
Shaw Island	1904	16				16	7.9%
Anacortes/Fidalgo Island	1905	20	29	2		52	25.9%
Mount Vernon/Burlington	1906		4			4	2.1%
Other West Skagit County	1907	4	4	5		13	6.5%
West Whatcom County	1908	4	8	2		15	7.4%
Lynnwood/Edmonds/Mountlake Terrace	1914	4				4	2.0%
Greater South Seattle/CBD	1916	4		2		6	3.2%
Greater North Seattle	1917	4				4	2.0%
Bothell-Kirkland/Redmond	1918		4			4	2.1%
Greater Bellevue/Mercer Island	1919		4	7		11	5.7%
Southwest King County	1920		4			4	2.1%
Other West King County	1921			2		2	1.2%
All Other Places	1924	8	8			16	8.2%
Destination Totals		64	105	22	8	200	100.0%
Destination Shares		32.3%	52.9%	10.9%	3.9%	100.0%	

Table 16-14
Anacortes-San Juan Islands O-D Trip Table
Weekday Service Period – Westbound – In-Vehicle Boardings

	ORIGIN	DESTINATION	Orcas Island	San Juan Island	Lopez Island	Shaw Island	Origin Totals	Origin Shares
			1901	1902	1903	1904		
	Orcas Island	1901		139			139	7.7%
	Lopez Island	1903	27	130			156	8.6%
	Anacortes/Fidalgo Island	1905	82	41	28	3	154	8.5%
	Mount Vernon/Burlington	1906		4	6		10	0.6%
	Other West Skagit County	1907	136	123	14	8	280	15.5%
	West Whatcom County	1908	55	69	22	7	154	8.5%
	Other BC/Canada	1911	4	10		3	16	0.9%
	Island County	1912	47	9			55	3.1%
	Greater Everett	1913	17	9	9		35	1.9%
	Lynnwood/Edmonds/Mountlake Terrace	1914	23	28	19	10	80	4.4%
	Other West Snohomish County/Camano Island	1915	16		8		24	1.3%
	Greater South Seattle/CBD	1916	150	57	14	3	223	12.3%
	Greater North Seattle	1917	33	38	11		82	4.5%
	Bothell-Kirkland/Redmond	1918	20	9			28	1.6%
	Greater Bellevue/Mercer Island	1919	9	9	9		26	1.4%
	Southwest King County	1920	44	25			69	3.8%
	Other West King County	1921	16	9	3		28	1.5%
	West Pierce/Thurston Counties	1922	4	4	8	10	26	1.4%
	Clallam/Jefferson/Kitsap Counties	1923	19	14			33	1.8%
	All Other Places	1924	79	93	20		192	10.6%
Destination Totals			779	818	171	43	1,811	100.0%
Destination Shares			43.0%	45.2%	9.4%	2.4%	100.0%	

Figure 16-3
Anacortes - San Juan Islands Westbound Weekday Service Period
Trip Origins & Destinations by Boarding Mode

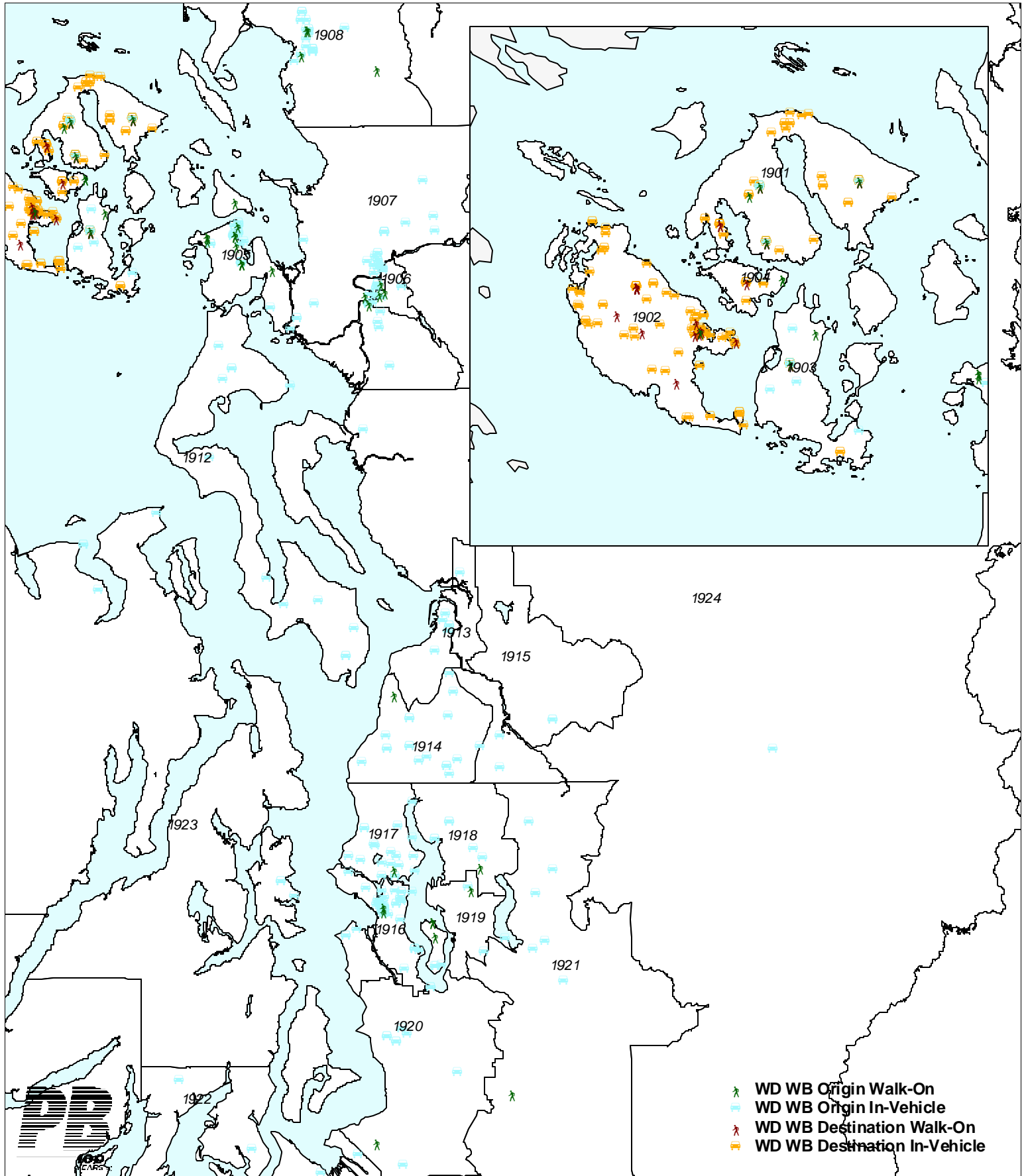


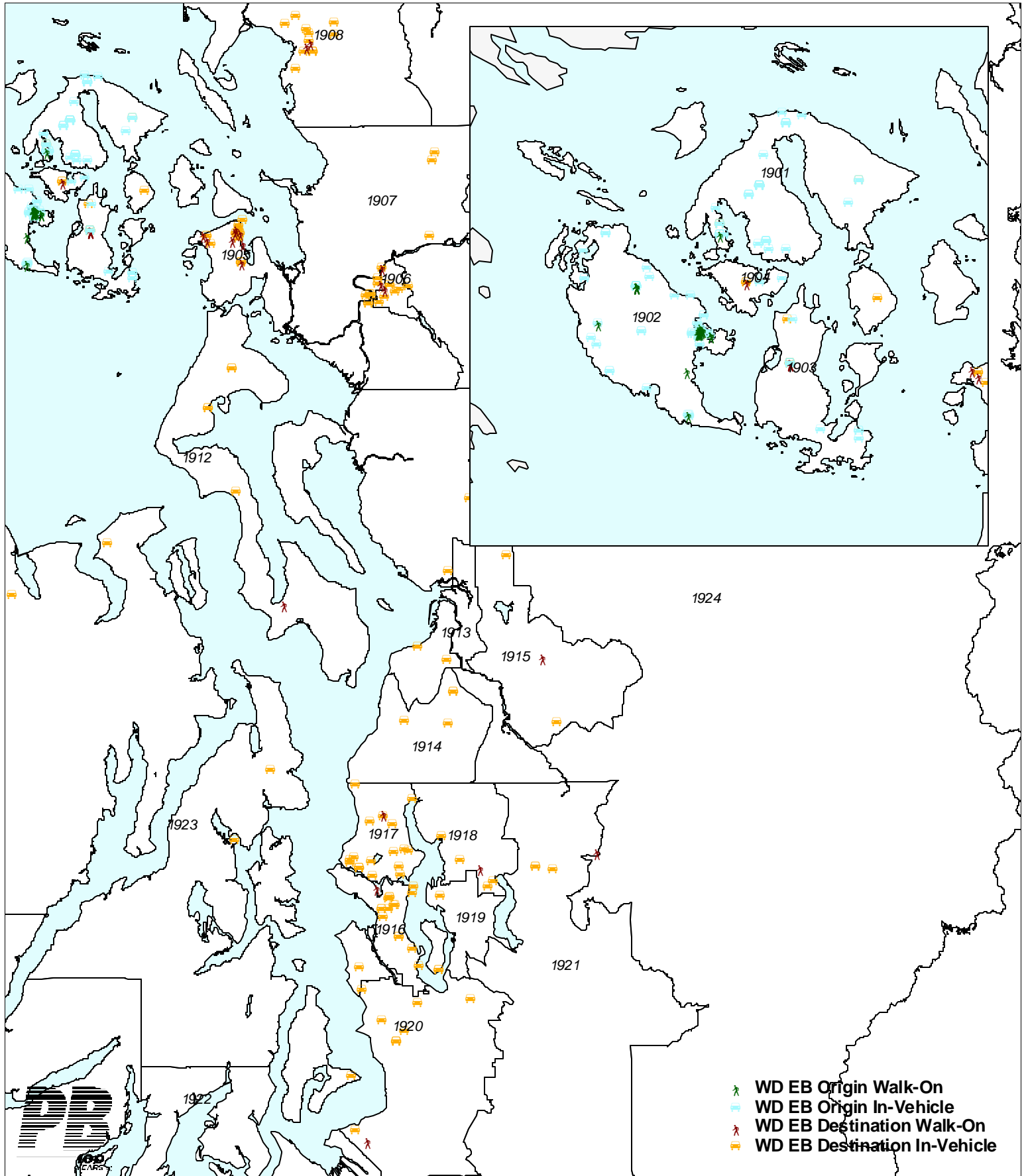
Table 16-15
Anacortes-San Juan Islands O-D Trip Table
Weekday Service Period – Eastbound – Walk-On Boardings

ORIGIN	DESTINATION															Origin Totals	Origin Shares
		Lopez Island 1903	Shaw Island 1904	Anacortes/Fidalgo Island 1905	Mount Vernon/Burlington 1906	Other West Strait County 1907	West Whatcom County 1908	Island County 1912	Other West Suburban County/Camano Island 1915	Greater South Seattle/CBD 1916	Greater North Seattle 1917	Bothell-Kirkland/Redmond 1918	Southwest King County 1920	Other West King County 1921	West Pierce/Thurston Counties 1922		
Orcas Island	1901									22						22	10.9%
San Juan Island	1902	68	5	43	5	11	11	5	5		5	5	5	5	5	179	89.1%
Destination Totals		68	5	43	5	11	11	5	5	22	5	5	5	5	5	201	100.0%
Destination Shares		33.6%	2.6%	21.2%	2.6%	5.3%	5.3%	2.6%	2.6%	10.9%	2.6%	2.6%	2.6%	2.6%	2.6%	100.0%	

Table 16-16
Anacortes-San Juan Islands O-D Trip Table
Weekday Service Period – Eastbound – In-Vehicle Boardings

ORIGIN	DESTINATION																					Origin Totals	Origin Shares
		Orcas Island 1901	Lopez Island 1903	Shaw Island 1904	Anacortes/Fidalgo Island 1905	Mount Vernon/Burlington 1906	Other West Strait County 1907	West Whatcom County 1908	Other BC/Canada 1911	Island County 1912	Greater Everett 1913	Lynnwood/Edmonds/Mountlake Terrace 1914	Other West Suburban County/Camano Island 1915	Greater South Seattle/CBD 1916	Greater North Seattle 1917	Bothell-Kirkland/Redmond 1918	Greater Bellevue/Mercer Island 1919	Southwest King County 1920	Other West King County 1921	Clallam/Jefferson/Knap Counties 1923	All Other Places 1924		
Orcas Island	1901		50		135	34		89	11		11	11		134	146		34	44	34	34	101	869	53.8%
San Juan Island	1902	28	99	14	56	34	84	56		11	6	22	17	34	34	11	6	22	6	6	45	589	36.5%
Lopez Island	1903							17		26			48	17	9	9		9		17		153	9.5%
Shaw Island	1904															2				2		5	0.3%
Destination Totals		28	149	14	191	68	84	163	11	37	17	34	65	186	188	22	39	76	39	59	145	1,615	100.0%
Destination Shares		1.7%	9.2%	0.9%	11.9%	4.2%	5.2%	10.1%	0.7%	2.3%	1.0%	2.1%	4.0%	11.5%	11.6%	1.4%	2.4%	4.7%	2.4%	3.7%	9.0%	100.0%	

Figure 16-4
Anacortes - San Juan Islands Eastbound Weekday Service Period
Trip Origins & Destinations by Boarding Mode



16.2.2 Sunday Survey Period Trip Patterns

Table 16-17 presents origin and destination locations for westbound Sunday survey period respondents and Figure 16-5 illustrates these locations for all boarding modes. In contrasting Sunday survey period destinations to those reported during the weekday service period, there is a higher percentage of Sunday travelers who are going to Lopez Island and fewer respondents reported destinations on San Juan Island. The 1999 findings also show considerably more destination locations reported on Orcas Island, nearly half compared to 29% in 1993. In comparing origin locations of Sunday survey respondents to weekday results, it appears that there is less inter-island travel, but otherwise origin information is quite similar. The distribution of origin locations for 1999 is also quite similar to the 1993 survey results. The most typical origin locations were west Watcom County, greater south and downtown Seattle, and the greater north Seattle area.

Eastbound Sunday survey respondents reported a more equal dispersion of origin locations, between Orcas, San Juan, and Lopez Island than did riders during the weekday service period or Sunday respondents to the 1993 survey. Eastbound Sunday survey period respondents reported different destination locations than weekday service period riders, as shown in Table 16-18 and graphically presented in Figure 16-6. While weekday service period riders reported destinations closer to the islands (Watcom County, Anacortes and Lopez Island), Sunday survey respondents reported more dispersed destination locations in the greater Seattle area and in the Bothell/Kirkland/Redmond district, in keeping with the higher share of recreational trips on weekends. However, when comparing the 1999 Sunday results with those from Sunday in 1993, the range of destination locations looks quite similar, though somewhat more dispersed than in 1993.

Figure 16-7 displays westbound origin and destination locations by boarding mode and Figure 16-8 presents this same information for eastbound trips. Westbound walk-on passengers have clear origin concentrations in Mount Vernon and the greater Seattle area, with relatively dispersed destination locations in the islands. Westbound ferry passengers who boarded in a vehicle show concentrations in the greater Seattle area, Mount Vernon, and Bellingham, and show a majority of destinations on San Juan Island, particularly in Friday Harbor. Eastbound walk-on passengers show a relatively even distribution of origin locations throughout the islands with a moderate concentration at Friday Harbor. Most walk-on passengers reported destinations in the greater Seattle area. In-vehicle passengers also show equally dispersed origin locations, with a majority of destination locations in the greater Seattle and Eastside areas.

Table 16-17
Anacortes-San Juan Islands O-D Trip Table
Sunday Survey Period – Westbound – All Boarding Modes

	DESTINATION					Origin Shares
		Orcas Island 1901	San Juan Island 1902	Lopez Island 1903	Shaw Island 1904	
ORIGIN						
Orcas Island	1901		1.5%			1.5%
Anacortes/Fidalgo Island	1905	1.1%	2.2%	1.5%	0.7%	5.6%
Mount Vernon/Burlington	1906	1.9%	0.4%			2.2%
Other West Skagit County	1907	2.6%	1.9%	2.6%		7.0%
West Whatcom County	1908	7.4%	1.9%	2.6%		11.9%
Other BC/Canada	1911			0.7%		0.7%
Island County	1912	1.5%	1.5%			3.0%
Greater Everett	1913	0.4%	0.7%			1.1%
Lynnwood/Edmonds/Mountlake Terrace	1914	3.3%	2.6%			5.9%
Other West Snohomish County/Camano Island	1915	0.7%				0.7%
Greater South Seattle/CBD	1916	4.1%	5.6%	1.5%	0.7%	11.9%
Greater North Seattle	1917	5.6%	1.9%	1.5%	0.7%	9.6%
Bothell-Kirkland/Redmond	1918	1.1%	2.2%		0.7%	4.1%
Greater Bellevue/Mercer Island	1919	2.6%	1.9%		0.4%	4.8%
Southwest King County	1920	2.6%	1.5%	0.4%		4.4%
Other West King County	1921		1.1%	0.4%		1.5%
West Pierce/Thurston Counties	1922	4.1%	2.2%	0.4%		6.7%
Clallam/Jefferson/Kitsap Counties	1923	2.2%	2.2%	0.4%		4.8%
All Other Places	1924	8.1%	2.6%	1.1%	0.7%	12.6%
Destination Shares		49.3%	33.7%	13.0%	4.1%	100.0%

Figure 16-5
Anacortes - San Juan Islands Westbound Sunday Survey Period Trips
All Boarding Modes

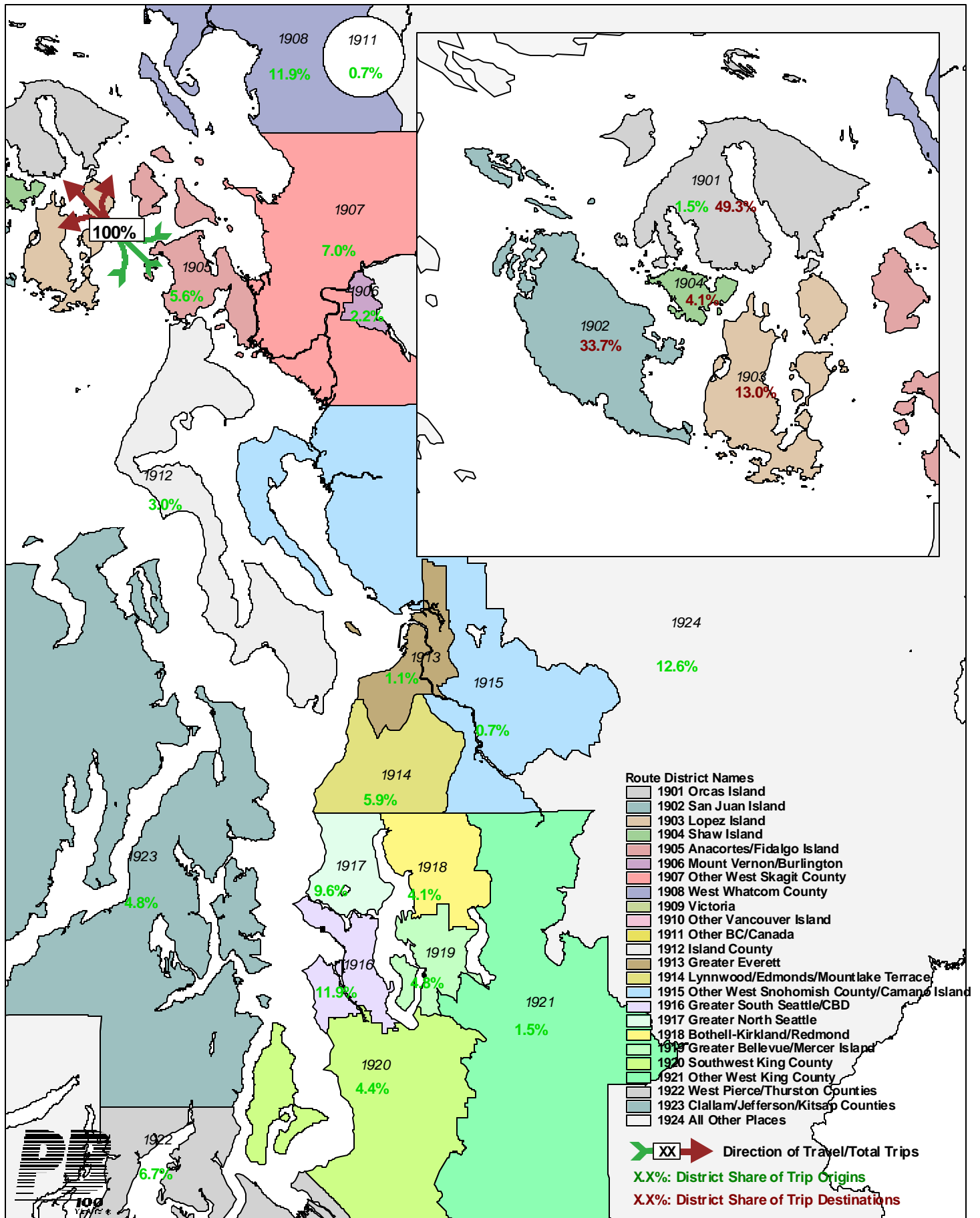


Table 16-18
Anacortes–San Juan Islands O-D Trip Table
Sunday Survey Period – Eastbound – All Boarding Modes

ORIGIN	DESTINATION																		Origin Shares	
	Lopez Island	Anacortes/Fidalgo Island	Mount Vernon/Burlington	Other West Slagit County	West Whatcom County	Other BC/Canada	Island County	Greater Everett	Lynnwood/Edmonds/Mountlake Terrace	Other West Snohomish County/Cameron Island	Greater South Seattle/CBD	Greater North Seattle	Bellevue/Kirkland/Redmond	Greater Bellevue/Mercer Island	Southwest King County	Other West King County	West Pierce/Thurston Counties	Clallam/Jefferson/Kitsap Counties		
Orcas Island	1901				1.5%		0.4%	0.4%	2.6%	1.5%	2.6%	6.2%	3.3%	1.8%	0.7%	4.0%	1.8%	0.7%	5.1%	32.5%
San Juan Island	1902	0.4%	2.6%	0.4%	1.1%	2.2%	0.4%	0.4%	1.8%	1.1%	5.1%	4.7%	4.4%	5.5%	5.1%	0.7%	3.6%		5.1%	44.5%
Lopez Island	1903		0.4%		0.4%	1.1%	0.7%		2.6%	1.1%	2.9%	1.8%	2.6%	1.5%	2.9%	2.2%	0.7%	1.1%	1.1%	23.0%
Destination Shares		0.4%	2.9%	0.4%	1.5%	4.7%	0.7%	0.7%	6.9%	3.6%	10.6%	12.8%	10.2%	8.8%	8.8%	6.9%	6.2%	1.8%	11.3%	100.0%

Figure 16-6
Anacortes - San Juan Islands Eastbound Sunday Survey Period Trips
All Boarding Modes

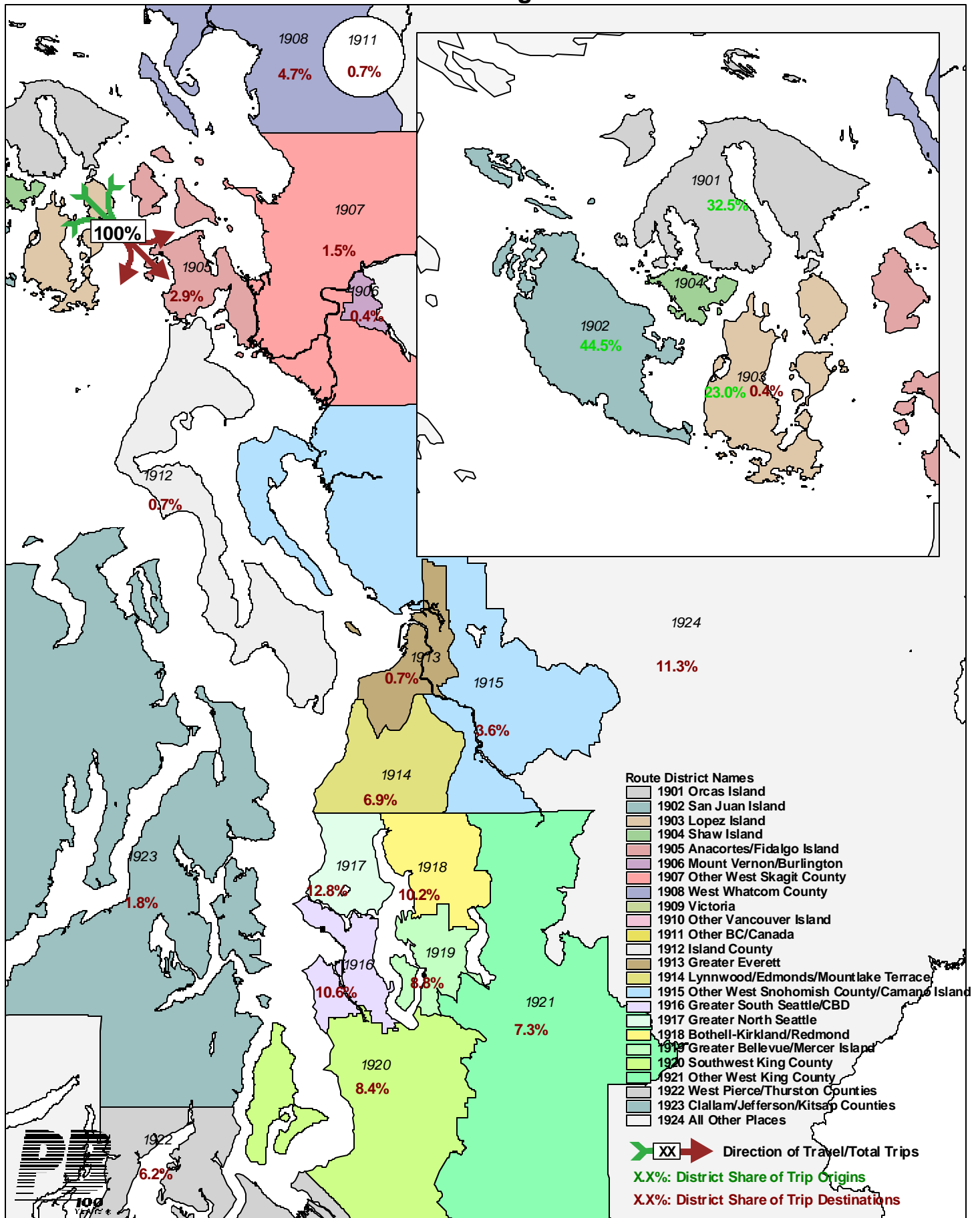


Figure 16-7
Anacortes - San Juan Islands Westbound Sunday Survey Period
Trip Origins & Destinations by Boarding Mode

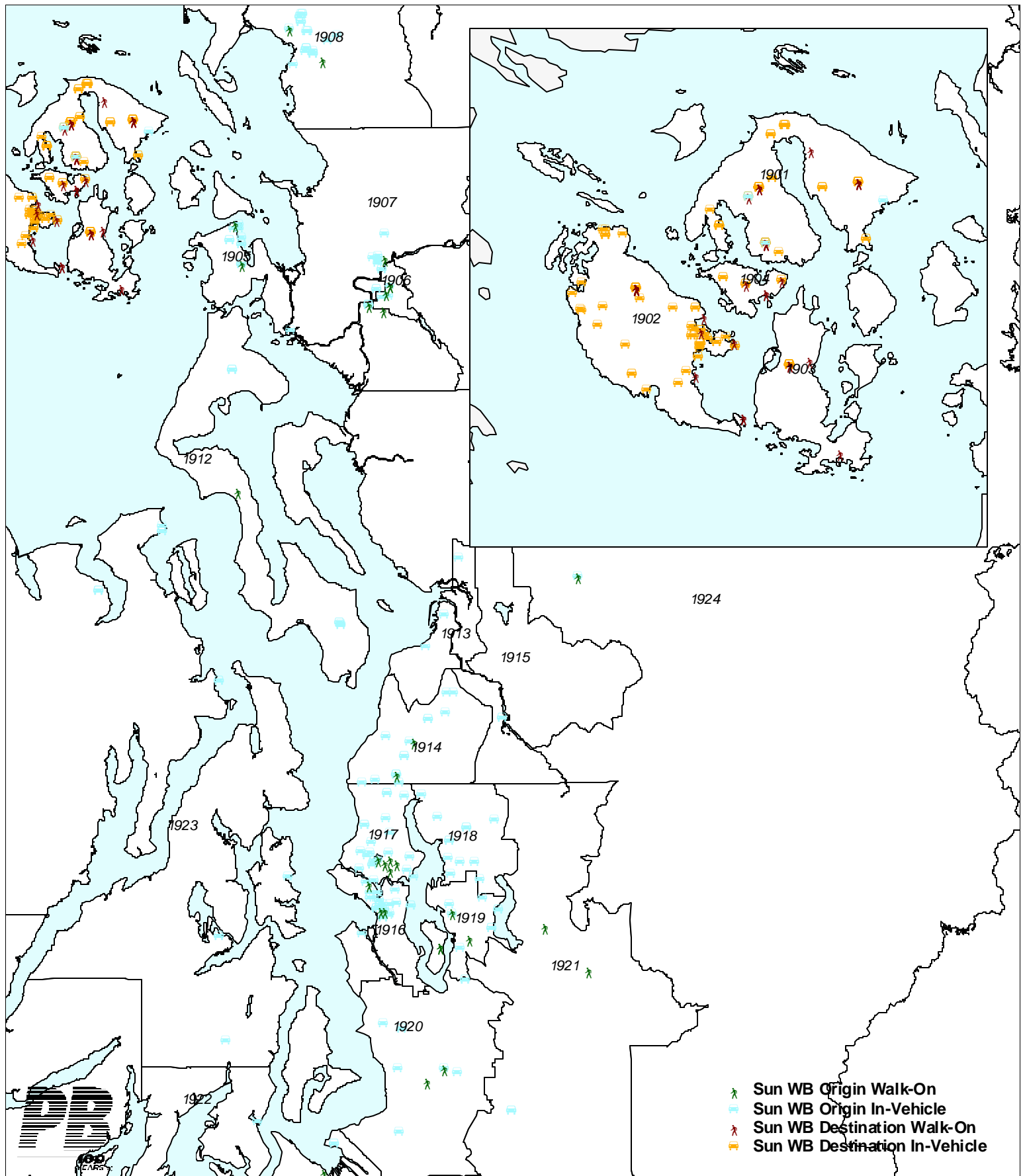


Figure 16-8
Anacortes - San Juan Islands Eastbound Sunday Survey Period
Trip Origins & Destinations by Boarding Mode

